



DEPARTMENT OF  
**ECOLOGY**  
State of Washington

# State of Washington WATER RIGHT PERMIT

File NR G4-35179  
WR Doc ID 4505990

PRIORITY DATE  
5/27/2008

WATER RIGHT NUMBER  
G4-35179P

MAILING ADDRESS  
BATTELLE MEMORIAL INSTITUTE  
902 BATTELLE BLVD  
PO BOX 999  
RICHLAND WA 99352-0999

SITE ADDRESS (IF DIFFERENT)

## Quantity Authorized for Withdrawal or Diversion

WITHDRAWAL OR DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)
1900	GPM	3064.7

## Purpose

PURPOSE	WITHDRAWAL OR DIVERSION RATE			ANNUAL QUANTITY (AF/YR)		PERIOD OF USE (mm/dd)
	ADDITIVE	NON- ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	
Industrial/Heat Exchange	1900		GPM			01/01 - 12/31

Source Location								
QQ Q	SEC	TWN	RNG	WRIA	COUNTY	LATITUDE	LONGITUDE	DATUM
W½SW¼	14	10 N	28 E	40	Benton	46°20'50.41"N	119°16'53.87"W	NAD83/WGS84

SOURCE FACILITY/DEVICE	WELL TAG ID #	LOCATION
Extraction Well 1	BAE 703	1,050 feet north and 40 feet east from the southwest corner of Sec. 14
Extraction Well 2	APG 742	1,215 feet north and 25 feet east from the southwest corner of Sec. 14
Extraction Well 3	ALE 911	1,400 feet north and 15 feet east from the southwest corner of Sec. 14
Extraction Well 4	APG 737	1,570 feet north and 5 feet east from the southwest corner of Sec. 14

WATER RIGHT PERMIT



**Place of Use (See Attached Map)****PARCELS (NOT LISTED FOR SERVICE AREAS)**

114083000002010

**LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE:**

Section 14, Township 10, Range 28, Quarter SW; That portion of the West half of the Southwest quarter of Section 14 and that portion of the East half of the Southeast quarter of Section 15, Township 10 North, Range 28 East, Willamette Meridian, Benton County, Washington, more accurately as follows: Commencing at the intersection of the East Right-of-Way of Stevens Drive and the North Right-of-Way of Battelle Blvd; Thence North 5°13'6" West 178 feet; thence North 6°6'45" West 792 feet to THE TRUE POINT OF BEGINNING; thence North 6°6'45" West 332 feet; thence North 5°9'32" West 189 feet; thence North 3°15'7" West 98 feet; thence North 89°50'11" East 917 feet; thence South 1°2'41" East 616 feet; thence South 89°48'41" West 870 feet to the TRUE POINT OF BEGINNING. Containing 12.6 acres.

**Proposed Works**

Battelle Memorial Institute has applied for an appropriation of public groundwater from four wells located north of Richland, Washington, directly adjacent to the Hanford Site boundary, approximately 4,200 feet west of the Columbia River. The appropriation will be for a non-consumptive use in an open-loop groundwater source heat pump (GSHP) system. The four proposed points of withdrawal (extraction wells) are completed to depths of 102 to 121 feet below ground surface (bgs) in the Ringold Formation. Groundwater will be withdrawn from the extraction wells, passed through a non-contact heat exchange, then returned to the same aquifer through one of four injection wells, completed to depths of 100 to 125 feet bgs, located approximately 800 feet east of the extraction wells.

**Development Schedule**

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
Completed	Completed	June 10, 2015

**Measurement of Water Use**

How often must water use be measured?	Daily
How often must water use data be reported to Ecology?	Annually (Jan 31)
What volume should be reported?	Total Annual Volume
What rate should be reported?	Daily Peak (Max) Rate of Withdrawal (gpm)

**Provisions****WATER QUALITY PERMIT**

Issuance of a Water Right Certificate and use of water under this Permit is contingent on obtaining and maintaining a companion State Waste Discharge Permit or NPDES permit from Ecology's Water Quality Program, including all its associated conditions.



## **WELLS, WELL LOGS AND WELL CONSTRUCTION STANDARDS**

All wells constructed in the state must meet the construction requirements of WAC 173-160 titled "Minimum Standards for the Construction and Maintenance of Wells" and RCW 18.104 titled "Water Well Construction". Installation and maintenance of an access port is required as described in WAC 173-160-291(3).

All wells must be tagged with a Department of Ecology unique well identification number. If you have an existing well and it does not have a tag, please contact the well-drilling coordinator at the regional Department of Ecology office issuing this decision. This tag must remain attached to the well. If you are required to submit water measuring reports, reference this tag number.

Depth to groundwater will be measured with a pressure transducer in each of the extraction wells. Monthly discharge monitoring reports will be made available upon request.

## **MEASUREMENTS, MONITORING, METERING AND REPORTING**

An approved measuring device must be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", WAC 173-173, which describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

<http://www.ecy.wa.gov/programs/wr/measuring/measuringhome.html>

Recorded water use data shall be submitted via the Internet. To set up an Internet reporting account, contact the Central Region Office. If you do not have Internet access, you can still submit hard copies by contacting the Central Region Office for forms to submit your water use data.

## **SCHEDULE AND INSPECTIONS**

Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

### **Project Completion**

The water right holder shall file the notice of Proof of Appropriation of Water (under which the Certificate of Water Right is issued) when the permanent distribution system has been constructed and the quantity of water required by the project has been put to full beneficial use. The Certificate will reflect the extent of the project perfected within the limitations of the water right. Elements of a proof inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions.

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**This Permit Subject to Cancellation**

This permit shall be subject to cancellation should the permittee fail to comply with the above development schedule and/or to give notice to the Department of Ecology on forms provided by the Department documenting such compliance.

Given under my hand and the seal of this office at Yakima, Washington this 15<sup>th</sup> day of April, 2011

Department of Ecology

OK

KQC

by

Mark C. Schuppe

Mark C. Schuppe  
Section Manager